(1)

OPERATORS' GUIDE
HAZARDOUS MATERIALS CONTROL MODULE

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The Hazardous Materials Control (HMC) Operator's Guide describes how to execute the module's various menu options. An overview description of the module and menus is included.

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1 TABLE OF CONTENTS

TABLE OF CONTENTS (Concluded)

LIST OF FIGURES

LIST OF TABLES

OPERATORS' GUIDE

HAZARDOUS MATERIALS CONTROL MODULE

1.0 GENERAL

1.1 Purpose of the Operators' Guide

This guide explains how a user interacts with the Hazardous Materials Control (HMC) module of the Naval Medical Command's (NAVMED) Navy Occupational Health Information Management System (NOHIMS). The information in this guide is intended to help the staff of the Occupational Safety and Health Office effectively use the HMC module in executing their duties. An overview of the HMC module appears in the Hazardous Materials Control Module Users' Manual.

This module extensively uses the Veterans Administration's (VA) FileMan data base management system. The NOHIMS Primer explains the general principles involved in using FileMan. The reader must carefully review the NOHIMS Primer before using this document.

1.2 References

The following publications provide background information on the HMC module:

- DoD Hazardous Materials Information System Procedures, DoD 6050.5M, July 1981
- Federal Supply Classification Part 1: Groups and Classes, SB 708-21, May 1982
- Navy Occupational Safety and Health (NAVOSH) Program Manual, OPNAV Instruction 5100.23B, August 31, 1983
- Material Management Application--Shelf Life/Hazardous Materials Analysis Package, August 1984
- Federal Standard--Material Safety Data Sheets, Preparation and Submission of (Proposed), Federal Standards 313C, April 14, 1983
- NAVSUP Instruction 5100.27: Navy Hazardous Material Control Program

- Consolidated Hazardous Item List (CHIL)--NAVSUP Publication 4500, July 1980
- NOHIMS Primer, The MITRE Corporation, January 1987
- Hazardous Material Control Module Users' Manual, The MITRE Corporation, 1986
- Users' Manual, Hazardous Materials Control Module, The MITRE Corporation, January 1987

1.3 Terms and Abbreviations

The following terms and abbreviations are used in this manual:

- CAS (Chemical Abstract Service) Number: A unique identification number given to chemical substances by the Chemical Abstract Service
- IHer: The Industrial Hygienist at the medical facility
- FileMan: The VA's data base management package used to develop NOHIMS
- FSC (Federal Supply Class): The first 4 digits of the 13-digit national stock number
- FSCM (Federal Supply Code for Manufacturers): A 5-digit code used to identify manufacturers and distributors of hazardous materials
- HMIS (Hazardous Material Information System): A computer-based information system developed to accumulate, maintain, and disseminate (on magnetic tape and microfiche) important characteristics of hazardous materials which exist throughout the DoD
- LSN (Local Stock Number): A number assigned by a single facility to identify a hazardous material used in that facility
- Material Name: The part number, trade name, or synonym commonly used to refer to a hazardous material
- MSDS (Material Safety Data Sheet): A summary of the information known about a hazardous substance; must be supplied by a vendor when a facility purchases such material
- MUMPS - (Massachusetts General Hospital Utility Multi-Programming System): The programming language used to develop NOHIMS

- o NFPA (National Fire Prevention Association) Code: A code assigned by the National Fire Prevention Association that reflects the health, fire, and reactivity hazards of a substance

- o NIIN (National Item Identification Number): The last 9 digits of the 13-digit national stock number

- o NIOSH (National Institute of Occupational Safety and Health) Number: A unique number assigned to materials by the National Institute of Occupational Safety and Health

- o NSN (National Stock Number): A 13-digit number used throughout the Navy to refer to any material purchased through the Federal Supply System

- o U.I.C. (Unit Identification Code): A unique number assigned to each Navy facility

- o VA: Veterans Administration

- o VDT: Video Display Terminal

- o Vendor: The manufacturer or distributor of material purchased for use in a Navy facility

- o Work Control Document: A document used in shipyards that describes how to perform a job that involves hazardous materials

- o WDS (Worker Data Sheet): A summary of health and safety information on hazardous materials that is intended for use by the worker

1.4 How To Use This Guide

This guide describes how to execute the module's various menu options. Section 2 contains an overview description of the module; this information should help the user determine if the system activities he or she wishes to perform are performed by this module. Section 3 presents an overview of the module's menus; this information is intended to help the user identify which of the menu options should be used (Section 2 of the NOHIMS Primer explains the mechanics of selecting menu options).

For ease and clarity of discussion, the module's menu options have been grouped into processes, where each process deals with a major feature of the module. Usually, the process is further broken down into various input and output subprocesses. Each section after Section 3 describes a specific process. Each of these sections begins with a discussion of the major points that must be known to use the process effectively . If the process has been broken into subprocesses, a brief discussion of the highlights of

each subprocess is then presented. In most cases, for each subprocess an actual prompt sequence is shown; notes are keyed to selected prompts. These notes present especially important information about the responses to these prompts. Messages and prompts shown in the figures that are displayed by the system are without underline; responses by the user are underlined. If the response to a prompt is straightforward, there is no accompanying note; the user should be able to understand how to respond to the prompt by using the Help message feature of FileMan. To understand prompts and prompt responses fully, the user must first read Sections 3 through 10 of the NOHIMS Primer.

In an attempt to keep the Operators' Guide as short as possible, most of the general information about the module (such as the contents of input forms and output reports) that was presented in the module's Users' Manual has been excluded from the Operators' Guide. If the user wishes to review the material in the Users' Manual while using the Operators' Guide, he or she should consult the Hazardous Materials Control Module Operators' Guide/Users' Manual Cross Reference (Table 1-1) to determine quickly which portion of the Users' Manual should be read.

It is important to recognize that the Operators' Guide is not organized by menu option; rather, it is organized by process. Frequently, a user will not wish to review the material that describes how to perform a process. Instead, the user will wish to review the material that deals directly with a specific menu option. When this situation occurs, the user can locate the desired section by either reviewing the Index in the back of this document or locating the appropriate menu option in the table appearing in Section 3. In the latter case, this specific section number that describes how to use the option appears in parenthesis after the option's name.

TABLE 1-1
HAZARDOUS MATERIALS CONTROL MODULE
OPERATORS' GUIDE/USERS' MANUAL CROSS REFERENCE

Operators' Guide	Users' Manual
1.1 Purpose of the Operators' Guide	1.1 Purpose of the Manual
1.2 References	1.2 References
1.3 Terms and Abbreviations	1.3 Terms and Abbreviations
2.1 Module Summary	1.4 Hazardous Materials Control Module Overview
2.2 Module Data Base Description	---
3.0 Module Menus	---
4.1 Introduction (Hazardous Materials Information Process)	---
4.2 Enter/Edit MSDS	3.3 Local MSDS Data Maintenance
4.3 Enter/Edit WDS	---
4.4 Enter/Edit Extra Fields	3.3 Local MSDS Data Maintenance
4.5 Enter/Edit Local Comments	3.2 HMIS Data Maintenance 3.3 Local MSDS Data Maintenance
4.6 Enter/Edit Work Control Document	3.3 Local MSDS Data Maintenance
4.7 Set Up New HMIS Record Input Sequence	3.2 HMIS Data Maintenance
4.8 HMIS Tape Load	3.2 HMIS Data Maintenance
4.9 Delete Materials Record	---
4.10 WDS Approval	---

TABLE 1-1
HAZARDOUS MATERIALS CONTROL MODULE
OPERATORS' GUIDE/USERS' MANUAL CROSS REFERENCE
(Concluded)

Operators' Guide	Users' Manual
4.11 Search for Material	4.4 Search for Data on Materials
4.12 Data Sheet Print	4.3 Data Sheet Production
4.13 Indexes of Materials Records	4.2 Report Production
4.14 MSDS Reports	4.2 Report Production
4.15 Manager Options	4.5 HMIS Update Results
4.16 Source of Worker Data Sheets	---
5.1 Introduction (Data Sheets Requested Information Process)	3.4 Data Sheet Request Tracking
5.2 Data Sheets Requested	---

2.0 MODULE OVERVIEW

2.1 Module Summary

The Industrial Hygiene (IH) office can use the HMC module to inform employees of health and safety hazards in the workplace and to track the movement of hazardous materials through the facility. As seen in Figure 2-1, the module performs these functions by maintaining health and safety data on hazardous materials used in the facility, and by tracking who requests information about any hazardous material.

Health and safety information on hazardous materials comes from several sources. The first source is the Hazardous Materials Information Systems (HMIS). Every three months, each medical facility receives six HMIS tapes that contain detailed information on all the hazardous materials used by the Defense Department. Four of the tapes are designated as "safety" tapes and two are designated as "transportation" tapes. The seventh tape contains reference information that is not used by NOHIMS. The IH office specifies which records should be selected from the HMIS tapes, and the information from those records is stored in NOHIMS files.

The second source of health and safety information are the vendors of hazardous materials who submit Material Safety Data Sheets (MSDSs). The data on each MSDS are manually keyed into the system and saved separately from HMIS information. In general, the data from the MSDS's are more current than the data on the HMIS tapes. However, both HMIS records and MSDS's contain the same type of data.

Each IH office may add work control document references and special health-related information such as toxicity, carcinogenicity, early signs of exposure, etc., to the HMIS and MSDS entries in NOHIMS. They may also annotate each record with comments that clarify the information in any field in the entry.

The p 'mary outputs of the HMC module consist of data sheets that describe the health and safety hazards of specific materials and screen displays of the same information. In addition, the module produces a variety of reports that describe the materials contained in the NOHIMS.

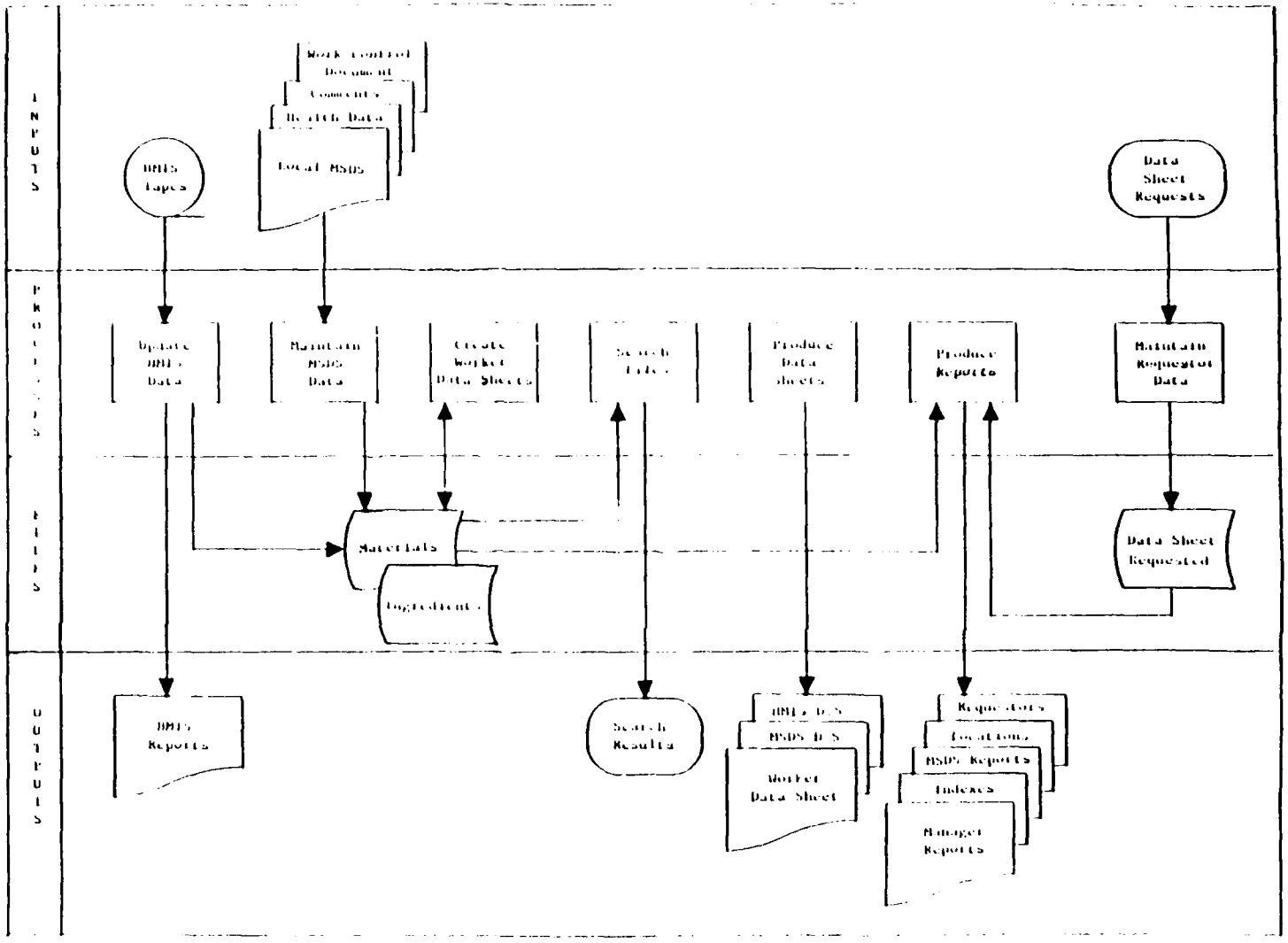

FIGURE 2-1

OVERVIEW OF HAZARDOUS MATERIALS CONTROL MODULE

2.2 Module Data Base Description

This module has the primary responsibility for creating and maintaining various application and reference files. Application files contain the data used to produce the module's output reports and displays. The contents of these files change frequently as new data is added or old data is removed. Reference files contain controlled vocabularies of terms, and thus limit what data a user can enter into the application files. The contents of these files may be static or change slowly over time. The HMC application and reference files are as follows:

Application Files	Reference Files
Materials	Haz Mat Control
Ingredients	
Data Sheet Requests	

The Materials file and Ingredients file are the primary repositories of health and safety information on hazardous materials for the HMC module. The Materials file has three basic types of entries:

- o HMIS entries
- o MSDS entries
- o WDS entries

One of the identification (ID) fields for an HMIS entry is a 13-digit national stock number. There may be many HMIS entries with the same stock number. Therefore, two additional fields are required to identify uniquely an HMIS entry. The first is the Federal Supply Code for Manufacturers (FSCM), a 5-digit code that identifies the vendor supplying the material. The second is the part number indicator, a one-character code that signifies whether the material is the first, second, third, etc., formulation of the material. The part number indicator should not be confused with the part number, the latter being a reference number attached by a vendor to a material. Together, the stock number, FSCM, and part number indicator uniquely identify an HMIS entry and are referred to as the "key fields" for HMIS entries in the remainder of this document.

The second type of Materials file entry is the local MSDS entry that is entered into the system manually from MSDS's received from vendors. The ID field in this type of entry is a locally-generated sequential number that uniquely identifies an MSDS. The first two characters in this number are "M/" and the next five digits are the facility's U.I.C. The remainder of the ID is the sequential number assigned by each facility.

The third type of entry in the Materials file is the WDS. The ID field for a WDS is similar to that for an MSDS. It begins with the characters "W/"

followed by the U.I.C. of the facility and a locally assigned sequential number. The entry itself is created by copying an HMIS entry or local MSDS entry and editing the data contained therein.

Each Materials file entry may have multiple ingredients. These ingredients are actually stored in the Ingredients file along with their CAS and NIOSH numbers. The Ingredients file is linked to the Stressor file for those ingredients whose name matches a stressor.

The Data Sheet Requests file contains an entry for each request that is made to the IH office for a data sheet. The ID field in this file is the requestor's name. Each entry contains the name of the material requested and the date and time of the request.

The Ingredient Exception Report file, HMIS Update file, and the HMIS Errors file are report files that contain data generated during an HMIS update. Information in these files is used to produce reports that document the status of an HMIS update.

The New Stock Numbers file is a temporary file that is created during an HMIS update. Each entry in this file contains the three key fields that uniquely identify an HMIS record (the stock number, the FSCM, and the part number indicator). The entries in this file determine which records on the HMIS tapes will be selected for inclusion in the NOHIMS data base.

The reference file is the Haz Mat Control file. The only entry in this file consists of the facility's U.I.C., the name of the facility, the last number assigned to a local MSDS, the last number assigned to a WDS, and a code that indicates whether the medical facility may load HMIS records by stock number only.

This module also uses files that were created and previously used by other modules. These files are used as reference files in that they contain a controlled vocabulary of terms, but in certain situations, they also serve as application files in that their contents may be updated by the user. These files and the modules that primarily create and maintain them are listed below:

- Administration

  -Stressor file

The Stressor file is used as a reference file by the Ingredients file. Any ingredient whose name matches a stressor name has a pointer from the Ingredients file to the Stressor file.

3.0 MODULE MENUS

The primary uses of the module's major menu options are as follows:

- Enter/Edit Hazard Data Menu--Used to enter local MSDS's, create worker data sheets, and edit all the fields in the Materials file for those two types of entries.

- Search Menu--Used to search the Materials file by any of ten different fields. The result of these searches is a display of the selected entry.

- Data Sheet Print Menu--Used to print a worker data sheet or a full listing of any entry in the Materials file.

- Indexes of Materials Records Menu--Enables you to print any of four indexes to the Materials file--three indexes for MSDSs and HMIS entries, and one index for worker data sheets.

- MSDS Reports Menu--Allows you to print any of twelve different management-oriented reports summarizing the contents of the Materials file.

- Request for Data Sheet Menu--Used to add an entry directly into the Data Sheet Requests file.

- Setup New HMIS Record and HMIS Tape Load Menus--Used to identify the HMIS records that should be loaded into the Materials file and to load those records from the HMIS tapes.

- Manager Options--Used to enter a U.I.C. and facility abbreviation at system startup time, mark a worker data sheet as approved for distribution, print four HMIS status reports, print a Data Sheets Requested report, and delete Materials file entries.

- List Source of Worker Data Sheets--Displays an MSDS number or national stock number and lists all the WDSs that have been generated from that MSDS or HMIS entry.

The actual module menu options appear in Table 3-1. Some of these menu options can only be used by the system manager; the use of these options is explained in the System Manager's Guide. The number in parenthesis after each option indicates the section number in this document where the discussion of how to use this option is presented.

When the system becomes operational at a site, each user will be granted specific access privileges to a module's menu options. When the user displays a module's menu options, only those options the user is allowed to use will be displayed.

TABLE 3-1
HAZARDOUS MATERIALS CONTROL MENUS

1.Enter/Edit Hazard Data

1 WDS Enter/Edit (4.3)
2 MSDS Enter/Edit (4.2)
3 Extra Fields Enter/Edit (4.4)
4 Local Comments Enter/Edit (4.5)
5 Work Control Document Enter/Edit (4.6)

2. Search for Material

1 Worker Data Sheet Search (4.11)
2 Material Name Search (4.11)
3 Ingredient Search (4.11)
4 Chemical Name Search (4.11)
5 Vendor Search (4.11)
6 Stock Number Search (4.11)
7 CAS/NIOSH Number Search (4.11)
8 MSDS Number Search (4.11)
9 Specification Search (4.11)
10 NIIN Search (4.11)
11 Work Control Document Search (4.11)
12 Contract No. Search (5.3)
13 Shop Issued To Search (5.3)
14 Building Issued to Search (5.3)
15 Description (Name) Search (5.3)

3. Data Sheet Print

1 Worker Data Sheet Print (4.12)
2 MSDS Print (4.12)

4. Indexes of Materials Records
1 Vendor Index (4.13)
2 Trade Name Index (4.13)
3 MSDS Date Index (4.13)
4 WDS Index (4.13)

TABLE 3-1
HAZARDOUS MATERIALS CONTROL MENUS
(Continued)

5. MSDS Reports

    1 MSDS Number Report (4.14)
    2 Stock Number Report (4.14)
    3 Entry Date Report (4.14)
    4 Specification Report (4.14)
    5 Health Code Report (4.14)
    6 Fire Code Report (4.14)
    7 Reactivity Code Report (4.14)
    8 Specific NFPA Code Report (4.14)
    9 Form of Material Report (4.14)
    10 Ingredients Report (4.14)
    11 Work Control Document Report (4.14)
    12 CAS/NIOSH Number Report (4.14)

6. Request For Data Sheet (6.2)

7. Set Up New HMIS Record (4.7)

8. HMIS Tape Load (4.8)

9. Manager Options

    1 Delete Materials Record (4.9)
    2 Data Sheets Requested (5.2)

TABLE 3-1
HAZARDOUS MATERIALS CONTROL MENUS
(Concluded)

9. Manager Options (Continued)

   3 Update of HMIS Records (4.15)
   4 Errors in Loading HMIS (4.15)
   5 No Matching HMIS Records (4.15)
   6 Ingredients Not in Stressor File (4.15)
   7 WDS Approval (4.10)
   8 Enter U.I.C./Facility Code - (System Manager's Guide)

10. List Source of Worker Data Sheets (4.16)

4.0 HAZARDOUS MATERIALS INFORMATION PROCESS

4.1 Introduction

The input and output options described in this section are used to manage the health and safety information needed by employees for their work. This information is stored in the Materials file in the form of three different entries--HMIS entries, MSDS entries, and worker data sheet entries. This section discusses how you can enter and edit these three types of entrie and produce management reports and data sheets summarizing the information in the Materials file.

The MSDS entries and worker data sheet entries are identified in the Materials file by a unique locally generated number. An MSDS number has the format "M/99999-999" where the 5-digit number before the hyphen is the facility's U.I.C., and the number following the hyphen is a locally generated sequence number. All MSDS numbers start with the characters "M/". Worker data sheet entries are identified by a similar number as MSDS entries except that the worker data sheet entries start with the characters "W/". Thus, the format for a worker data sheet number is "W/99999-999".

When editing an MSDS or worker data sheet entry, you need to know that the prompt sequence is divided into blocks when it comes to using the "^" convention. There are four blocks of prompts in both MSDS's and worker data sheets--prompts prior to the "Ingredients" prompts, the prompts related to Ingredients, prompts following Ingredients to the end of the standard MSDS field, and special prompts designed by the Navy. You may not use the "^" convention to skip from one block to another. A new MSDS entry will be deleted if you "^" out of the prompt sequence before the "Ingredients" prompt. An old MSDS or worker data sheet will not be deleted. Neither entry will allow the "^" convention to skip around prior to the Ingredients section.

MSDS's have a U.I.C. field and a facility abbreviation field in their prompt sequence. The U.I.C. used in creating the MSDS number should be the same as the U.I.C. entered in the prompt sequence, and it should refer to the same facility as that entered in the prompt sequence.

4.2 Enter/Edit MSDS

To illustrate an MSDS enter/edit sequence, information on a new MSDS for an imaginary solvent is entered as shown in Figure 4-1. This entry sequence typifies data entry of MSDS's for a facility. The circled numbers in Figure 4-1 correspond to the numbered notes in the same figure. Messages and prompts displayed by the system are shown without underline; responses by the user are underlined. The notation (Primer, Section x.x) in the notes indicates that amplifying material on how to respond to the prompt appears in the designated section in the NOHIMS Primer.

```
LAST MSDS NUMBER ADDED: M/54545-12                    (1)

ENTER MSDS NUMBER: M/00181-23                         (2)
   ARE YOU ADDING 'M/00181-23' AS A NEW MATERIALS (THE 73RD)? Y  (YES)
MSDS DATE: ??
EXAMPLES OF VALID DATES:
  JAN 22 1957 or 22 JAN 57 or 1/22/57 or 012257
  T   (FOR TODAY),  T+1 (FOR TOMORROW),  T+2,  T+7,  etc.
  T-1 (FOR YESTERDAY),  T-3W (3 WEEKS AGO), etc.
IF THE YEAR IS OMITTED, THE COMPUTER USES THE CURRENT YEAR
YOU MAY OMIT THE PRECISE DAY, AS:  JAN, 1957

MSDS DATE: T  (SEP 2, 1986)
U.I.C.: 54545// 00181
FACILITY: MINS// MARE                                 (3)
Select LOCAL STOCK NUMBER: MARE-101                   (4)
   ARE YOU ADDING 'MARE-101' AS A NEW LOCAL STOCK NUMBER (THE 1ST FOR THIS MATERIAL)? Y
  (YES)
Select LOCAL STOCK NUMBER:
MANUFACTURER NAME: UNION CARBIDE                      (5)
MANUFACTURER ADDRESS: OLD RIDGEBURY ROAD, DANBURY CT. 06817   (6)
EMERGENCY TELEPHONE NUMBER: (304) 291-3847            (7)
```

Figure 4-1

EXAMPLE OF ENTER/EDIT MSDS

```
CHEMICAL NAMES: FLUORINE (8)
Select MATERIAL NAME: SUPERSOL-80 (9)
   ARE YOU ADDING 'SUPERSOL-80' AS A NEW MATERIAL NAME (THE 1ST FOR THIS MATERIALS)? Y
  (YES)
Select MATERIAL NAME: DEGREASING SOLVENT
   ARE YOU ADDING 'DEGREASING SOLVENT' AS A NEW MATERIAL NAME (THE 2ND FOR THIS MATERIALS)? Y
  (YES)
Select MATERIAL NAME: _
CHEMICAL FAMILY: FLUOROCARBONS
FORMULA: C6H5-OH
INGREDIENT: FLUORINE (10)
   ARE YOU ADDING 'FLUORINE' AS A NEW INGREDIENTS (THE 82ND)? Y (YES)
   ARE YOU ADDING A NEW INGREDIENTS (THE 1ST FOR THIS MATERIALS)? Y (YES)
DELETE INGREDIENT? NO// _ (11)
PERCENT: 5
TLV: 10 (12)
TLV UNITS: PPM
PEL: 100 (12)
PEL UNITS: MG/MM
OTHER LIMIT: _ (12)
OTHER UNITS: _
CAS NO.: CAS-10938 (13)
NIOSH NO.: N-3928 (14)
INGREDIENT: STODDARD SOLVENT
         ...OK? YES// Y (YES)
   ARE YOU ADDING A NEW INGREDIENTS (THE 2ND FOR THIS MATERIALS)? Y (YES)
DELETE INGREDIENT? NO// _
PERCENT: 58
TLV: 20
TLV UNITS: PPM
PEL: 392
PEL UNITS: MM
OTHER LIMIT: _
OTHER UNITS: _
CAS NO.: 1091829// _
NIOSH NO.: N-10928// _
INGREDIENT: _ (15)
ARE YOU THROUGH WITH INGREDIENTS? NO// Y (16)
```

FIGURE 4-1

EXAMPLE OF ENTER/EDIT MSDS
(Continued)

```
C-INGREDIENTS: STODDARD SOLVENT IS AN INERT CARRIER                    (17)
BOILING POINT: 100 C
VAPOR PRESSURE: 29 MM HG
VAPOR DENSITY: 1.203
SOLUBILITY IN WATER: 21 PPM
APPEARANCE AND ODOR: CLEAR AND ODORLESS
SPECIFIC GRAVITY: 2.19
PERCENT VOLATILE BY VOLUME: ^SPECIFIC GRAVITY
SPECIFIC GRAVITY: 2.19// 2.19
PERCENT VOLATILE BY VOLUME: 29%
EVAPORATION RATE PER REFERENCE: 10
FLASH POINT: 200 C
LOWER EXPLOSIVE LIMIT: 1.8
UPPER EXPLOSIVE LIMIT: 100.9
EXTINGUISHING MEDIA: FOG
FIRE FIGHTING PROCEDURES: USE SELF-CONTAINED BREATHING APPARATUR
FIRE AND EXPLOSION HAZARDS: FIRE HAZARD DUE TO LOW FLASH POINT
TLV FOR THE MIXTURE: 200 PPM
EFFECTS OF OVEREXPOSURE: NAUSEA, DIZZINESS, HEADACH3, EYE IRRITATION
EMERGENCY AND FIRST AID PROC.: REMOVE TO FRESH AIR;WASH WITH WATER
ROUTE OF EXPOSURE: INHALATION
SPECIAL/EARLY WARNING PROP.: LIGHTHEADEDNESS
ACUTE TOXIC EFFECTS: NAUSEA
CHRONIC TOXIC EFFECTS: NONE
CARCINOGENICITY: UNKNOWN
TERATOGENICITY: UNKNOWN
MUTAGENICITY: UNKNOWN
MSDS EXPOSURE LIMIT: 250 PPM
STABILITY: STABLE
COND. TO AVOID (INSTABILITY): KEEP ;FROM HEAT,SPARKS,OPEN FLAME
MAT. TO AVOID (INCOMPATIBLE): CAUSTICS,AMMONIA,INORGANIC ACIDS
HAZARD. DECOMPOSITION PRODUCTS: CARBON DIOXIDE,CARBON MONOXIEDE,HYDROGEN CHLORIDE
HAZARD. POLYMERIZATION OCCUR: NO  WILL NOT OCCUR
COND. TO AVOID (HAZ. POLYM.):
SPILL AND LEAK CONTROL: ELIMINATE IGNITION SOURCES
WASTE ELIMINATION: INCINERATE
MIXTURE REPORTABLE SPILL QTY.:
NEUTRALIZING AGENT: SODA ASH
RESPIRATORY PROTECTION: USE RESPIRATOR IN CONFINED AREA
VENTILATION: NORMAL
PROTECTIVE GLOVES: RUBBER OR PVC
EYE PROTECTION: SAFETY GOGGLES
OTHER PROTECTIVE EQUIPMENT:
HANDLING/STORAGE PRECAUTIONS:
OTHER PRECAUTIONS:
STORAGE COMPATIBILITY CODE:
SUPPLEMENTAL DATA:

END MSDS; START SPECIAL FIELDS                                         (18)


MATERIAL FORM: LIQ
SPECIAL LABELING: NONE
SPECIAL TRAINING REQUIRED: DEGREASING
COMMON USE: ^SPECIAL TRAINING REQUIRED
SPECIAL TRAINING REQUIRED: DEGREASING// NONE
COMMON USE: DEGREASING
Select WORK CONTROL DOCUMENT NUMBER: ?
 ANSWER WITH WORK CONTROL DOCUMENT
   YOU MAY ENTER A NEW WORK CONTROL DOCUMENT, IF YOU WISH
      ANSWER MUST BE 1-20 CHARACTERS IN LENGTH
Select WORK CONTROL DOCUMENT NUMBER: PI-101
   ARE YOU ADDING 'PI-101' AS
       A NEW WORK CONTROL DOCUMENT NUMBER (THE 1ST FOR THIS MATERIALS)? Y  (YES)
  WORK CONTROL DOCUMENT NAME: USE OF STANDARD SOLVENTS
  WORK CONTROL DOCUMENT DATE: 1/18/85  (JAN 18, 1985)
  WORK CONTROL DOCUMENT TYPE: INTERNAL
Select WORK CONTROL DOCUMENT NUMBER:
REMARKS:                                                               (19)
  1>USE OF THIS MATERIAL IS RESTRICETED TO POSTED AREAS
  2>ANY OTHER USE WILL RESULT IN DISCIPLINARY ACTION AND/OR FINES
  3>
EDIT Option:
```

FIGURE 4-1

```
LAST MSDS NUMBER ADDED: M/00181-23
ENTER MSDS NUMBER:
```

EXAMPLE OF ENTER/EDIT MSDS
(Continued)

```
LAST MSDS NUMBER ADDED: M/06835-43

ENTER MSDS NUMBER: 3
   ARE YOU ADDING 'M/54545-3' AS A NEW MATERIALS (THE 72ND)? N  (NO)

LAST MSDS NUMBER ADDED: M/06835-43

ENTER MSDS NUMBER: 43                    (20)
   ARE YOU ADDING 'M/54545-43' AS A NEW MATERIALS (THE 72ND)? Y  (YES)
MSDS DATE: T  (AUG 29, 1986)
U.I.C.: 54545//__
FACILITY: MINS//__
Select LOCAL STOCK NUMBER: MINS-987
   ARE YOU ADDING 'MINS-987' AS A NEW LOCAL STOCK NUMBER (THE 1ST FOR THIS MATERIAL)? Y
  (YES)
Select LOCAL STOCK NUMBER: __
MANUFACTURER NAME: ALLIED CHEMICAL
MANUFACTURER ADDRESS: 201 MAPLE STREET
EMERGENCY TELEPHONE NUMBER: ^MANUFACTURER ADDRESS
   SORRY, '^' NOT ALLOWED!??
EMERGENCY TELEPHONE NUMBER: 201 393-8574
CHEMICAL NAMES: __
Select MATERIAL NAME: ^__                (20)
M/54545-43 DELETED!

LAST MSDS NUMBER ADDED: M/54545-43

ENTER MSDS NUMBER: __
```

FIGURE 4-1

EXAMPLE OF ENTER/EDIT MSDS
(Concluded)

NOTES ON MSDS INPUT SEQUENCE

1. This message displays for your information the last local MSDS number that you entered into the system.

2. At this prompt you can do a lookup for an existing MSDS (Primer, Section 6.1, 6.3, and 8.2) or add a new MSDS (Primer, Section 8.2.1). If you wish to recall the last MSDS that was entered or edited, you can press the space bar and then the RETURN key and the previous MSDS will be brought up for editing. If you enter all the characters of an MSDS number up through and including the hyphen, the system will display all the MSDS's for the facility whose U.I.C. is part of the MSDS number. You can also look up an existing MSDS by just entering the sequence number that follows the hyphen in the MSDS number. The system appends the facility U.I.C. and "M/" before the hyphen and uses the resulting number to look for a match.

   We have entered a new MSDS number in this example. There are two ways to enter a new MSDS number. The first way is to enter the entire number in the standard format (i.e., "M/99999-999"). The second way of entering a new MSDS number is to enter just the final sequence number. If you do this, the system will automatically append an "M/" and the default U.I.C. code in front of the sequence number.

3. You should enter the abbreviated name for your facility in this free text field (Primer, Section 4.2). You are automatically prompted with the default facility entered at system startup time. If this is not the correct facility for the MSDS, you should enter the correct abbreviation. If the default is correct, simply null through the prompt.

4. This is a multiple field as indicated by the word "Select" in the prompt (Primer, Section 8.3). There is no required format for the local stock number. When you have finished entering all the local stock numbers associated with this MSDS, null through the Local Stock Number prompt to get to the next prompt in the sequence.

5. You should enter the name of the Manufacturer here. If you do not know the manufacturer's name, null through the prompt. Do not enter the distributor's name here as you will have an opportunity to enter it later.

6. The entire address for the manufacturer should be entered in this field including the street address, city, state, and zip code. Do not enter a distributor's address here as you will have an opportunity to enter it later.

7. This field is intended to be the first telephone number to use in case of emergency. It may be the number of the manufacturer, distributor, or any other emergency number that your facility may prefer. You should include the area code with the number.

8. As this is not a multiple field, all chemical names for this material must be entered at once, separated by any punctuation you prefer.

9. The material name field is a multiple as indicated by the word "Select". The first name entered here should be the material's trade name. See Primer, Section 8.3 for information on adding a new entry. When you have finished entering all names associated with the material, null through the Material Name prompt to continue with the prompt sequence.

10. The Ingredient field is a multiple even though it does not use the word "Select" in the prompt. It is also a pointer field (Primer, Section 4.7).

    The next prompts (Items 11 through 14) all refer to the ingredient just entered.

11. Since the ingredients fields has special links to other files, the delete function is accomplished differently from that described in the Primer, Section 8.2.2. If you wish to delete an ingredient, you should enter the name of the ingredient after the "Ingredient?" prompt and answer "YES" to the "Delete Ingredient?" prompt. During a normal input sequence, you will accept the "NO" default for the "Delete Ingredient?" prompt and continue with the prompt sequence for ingredients.

12. The prompts for TLV, PEL, and other limits should be answered with just the numeric value of the limit. The limit units should be entered after the prompts calling for units.

13. Enter the CAS number for the ingredient here. If the ingredient has already been entered for some other material and the CAS number was entered at that time, you will automatically be prompted with that CAS number. You can either accept the default or enter a new CAS number. If you enter a new number, the old default will be erased and only your new CAS number will be retained for all materials with that ingredient.

14. The NIOSH number is handled in the same way as the CAS number described in Note 13.

15. When you have entered all the ingredients for this material, null through this prompt.

16. To exit from the "Ingredients" prompts, answer this prompt with a "YES". This prompt prevents you from exiting from the "Ingredients" prompt sequence before you have entered all ingredients. If you enter "NO" to this prompt or just press the RETURN key, you will be returned to the "Ingredients" prompt.

17. This prompt is for comments about the Ingredients section of the MSDS. All comment prompts have a label that starts with "C-". Most of the fields on an MSDS have associated comment fields that are discussed in a different prompt sequence. You will have an opportunity to enter those other comments later.

18. This message marks the end of the standard MSDS prompts. The prompt sequence that follows contains prompts for fields that have been added to the standard MSDS. You may not use the "^" convention to return to the standard MSDS fields. If you wish to edit any of those fields, you must exit this sequence and start the edit sequence from the top.

19. The Remarks field is a word processing field (Primer, Section 4.6).

20. The following entry sequence demonstrates what happens if you use the "^" convention in response to prompts that occur before the "Ingredients" prompt. If you "^" out of this prompt sequence before the Ingredients prompt and this is a newly entered MSDS, the MSDS will be deleted. You must continue to the Ingredients prompt in order to save the MSDS when you "^" out. When editing an old MSDS you may exit at any time and the MSDS will be saved.

4.3 Enter/Edit WDS

This option creates a worker data sheet from an existing local MSDS entry. As shown in Figure 4-2, the exact local MSDS entry is specified. The system then copies the data from the local MSDS entry to the worker data sheet entry. The worker data sheet can then be edited in a manner similar to the edit sequence for a local MSDS.

4.4 Enter/Edit Extra Fields

In this option, additional information is entered that is not usually part of a standard MSDS or HMIS record, including such items as toxicity, carcinogenicity, National Fire Prevention Association (NFPA) code, manufacturer and distributor addresses and telephone numbers, special labeling, neutralizing agents, etc. This information may come from the Navy Environmental Health Center (NEHC) or from the local OSH office, and may be appended to any of the three types of Materials file entries (HMIS, MSDS, WDS). Figure 4-3 contains details about this prompt sequence.

4.5 Enter/Edit Local Comments

HMIS entries and local MSDS entries may be annotated by entering comments associated with one or more of the standard fields in an HMIS or MSDS entry. All comment fields are identified by the characteristic "C-" preceding the name of the field to which they refer. For example, C-STOCK NUMBER is the name of the comment field that is associated with the STOCK NUMBER data field. Since the list of comment fields is quite long, a good technique is to select specific fields by entering an "^" followed by the name of the comment field rather than by nulling through the entire list of comment prompts to get to the right one. This option may be exited at any time by entering a single "^". Details on this prompt sequence are given in Figure 4-4.

Some of the special fields described in the previous section do not have a comment field associated with them since their content is entirely under the control of the local facility. These fields are:

- Special labeling
- Route of exposure
- Carcinogenicity
- Teratogenicity
- Mutagenicity

```
Select AGENCY UNIT CODE/ABBREVIATION: MARE ISLAND NAVAL SHIPYARD  MINS  (1)  MARE ISLAND NAVAL SHIPYARD  IN:MINS
        ...OK? YES// __ (YES)

LAST WORKER DATA SHEET NUMBER ADDED: W/54545-50  (2)

ENTER WORKER DATA SHEET NUMBER: 51 ??  (3)
   ARE YOU ADDING 'W/54545-51' AS A NEW MATERIALS (THE 74TH)? Y (YES)
ENTER SOURCE MSDS: M/00181-23          SUPERSOL-80    UNION CARBIDE  (4)
MDS DATE: T (SEP 2, 1986)  (5)
U.I.C.: 00181// __  (6)
FACILITY: MARE// __
Select LOCAL STOCK NUMBER: MARE-101// __
MANUFACTURER NAME: UNION CARBIDE// __
MANUFACTURER ADDRESS: OLD RIDGEBURY ROAD, DANBURY CT. 06817
          Replace __
EMERGENCY TELEPHONE NUMBER: (304) 291-3847// __
CHEMICAL NAMES: FLUORINE// __
Select MATERIAL NAME: DEGREASING SOLVENT// __
CHEMICAL FAMILY: FLUOROCARBONS// __
FORMULA: C6H5-OH// __  (7)
NFPA CODE: 123ACID  (7)
COLOR: YELLOW  (7)
COLOR NUMBER: 98
INGREDIENT: ?
 ANSWER WITH INGREDIENTS
CHOOSE FROM:
   1          FLUORINE
   2          STODDARD SOLVENT
   YOU MAY ENTER A NEW INGREDIENTS, IF YOU WISH
 ANSWER WITH INGREDIENTS NAME
 DO YOU WANT THE ENTIRE 82-ENTRY INGREDIENTS LIST? N (NO)
   YOU MAY ENTER A NEW INGREDIENTS, IF YOU WISH
     ANSWER MUST BE 1-90 CHARACTERS IN LENGTH
INGREDIENT: __
ARE YOU THROUGH WITH INGREDIENTS? NO// Y
C-INGREDIENTS: __
BOILING POINT: 100 C// ^SUPPLEMENTAL DATA  (8)
SUPPLEMENTAL DATA: __
AUTO IGNITION TEMPERATURE: 200 C  (9)
REMARKS:
  1:USE OF      MATERIAL IS RESTRICETED TO POSTED AREAS
  2:ANY OT     SE WILL RESULT IN DISCIPLINARY ACTION AND/OR FINES
EDIT Option:
  1:USE OF THIS MATERIAL IS RESTRICETED TO POSTED AREAS
  Replace CETED With CTED  Replace __
   USE OF THIS MATERIAL IS RESTRICTED TO POSTED AREAS
Edit line: __
EDIT Option: __

END WDS; START SPECIAL FIELDS  (10)


MATERIAL FORM: LIQ// __
SPECIAL LABELING: NONE// __
SPECIAL TRAINING REQUIRED: NONE// __
COMMON USE: DEGREASING// __
Select WORK CONTROL DOCUMENT NUMBER: PI-101// __
  WORK CONTROL DOCUMENT NUMBER: PI-101// __
  WORK CONTROL DOCUMENT NAME: USE OF STANDARD SOLVENTS
          Replace __
  WORK CONTROL DOCUMENT DATE: JAN 18,1985// __
  WORK CONTROL DOCUMENT TYPE: __
Select WORK CONTROL DOCUMENT NUMBER: __
REMARKS:
  1:USE OF THIS MATERIAL IS RESTRICTED TO POSTED AREAS
  2:ANY OTHER USE WILL RESULT IN DISCIPLINARY ACTION AND/OR FINES
EDIT Option: __
Select AGENCY UNIT CODE/ABBREVIATION: __
```

FIGURE 4-2

EXAMPLE OF ENTER/EDIT WDS

NOTES ON WORKER DATA SHEET INPUT SEQUENCE

1. You must enter the facility name that you are authorized to use for creating worker data sheets. If you enter a facility name for which you have no authority, a bell will ring and you will return to the "Agency Unit" prompt. If you are authorized to use more than one facility name, use that facility name whose U.I.C. you want to see as part of the worker data sheet number.

2. The last worker data sheet number you added is displayed for your information at this point. Each facility has its own last number stored in the system.

3. Entry of the worker data sheet number is similar to entry of the local MSDS number. You may enter the entire number or just the sequence number following the hyphen. (See Note 2 in Figure 4-1 for more details).

4. Since a new worker data sheet is being created here, you are prompted for the HMIS or local MSDS entry that you want to use as the basis for the worker data sheet. You may enter either an HMIS stock number or a local MSDS numbe . If you enter a number that is not in the system, a bell will ring and the prompt will be repeated. If you exit from this prompt without choosing a legitimate HMIS or local MSDS entry, the system will delete the worker data sheet number you just entered and return to the beginning of the prompt sequence.

5. You should assign a date to the worker data sheet according to the policy of your particular facility.

6. The default for this prompt is the U.I.C. that was on the original MSDS or HMIS entry. You may accept this default or enter a different U.I.C. If you enter a new code, that code will show up on printouts of the worker data sheet, but it will not replace the U.I.C. already embedded in the worker data sheet number.

7. These three prompts are not part of the standard MSDS entry sequence. Therefore, you may want to enter values for them at this point although these are optional fields.

8. The prompts between "Boiling Point" and "Supplemental Data" are the same on a worker data sheet as on a local MSDS. See Section 4.2 of this Guide for a discussion of these fields.

NOTES ON WORKER DATA SHEET INPUT SEQUENCE
(Concluded)

9. This field is not part of the standard MSDS entry sequence. You must enter a value at this point if you want this information on your worker data sheet.

10. This message indicates you have reached the end of the standard MSDS prompts and are starting on the prompt sequence for special NOHIMS fields. This division of prompts into standard MSDS prompts and special NOHIMS prompts is parallel to the division found in the local MSDS prompt sequence. The remainder of the prompt sequence is the same as in the special fields section of the local MSDS prompt sequence.

```
ENTER MATERIAL NAME: ADHESIVE  (1)
     1   ADHESIVE  M/06835-15       ADHESIVE    PERMAFUSE CORP
     2   ADHESIVE  W/54545-27       ADHESIVE    PERMAFUSE CORP
     3   ADHESIVE  W/54545-50       ADHESIVE    PERMAFUSE CORP
     4   ADHESIVE  W/64545-191       ADHESIVE    PERMAFUSE CORP
     5   ADHESIVE E-1658B - RED  M/00288-02       ADHESIVE E-1658B - R    BORDEN
CHOOSE 1-5: 1  M/06835-15
Select MATERIAL NAME: ADHESIVE// ?          (2)
 ANSWER WITH MATERIAL NAME:
   1           ADHESIVE
   YOU MAY ENTER A NEW MATERIAL NAME, IF YOU WISH
      ANSWER MUST BE 1-50 CHARACTERS IN LENGTH
Select MATERIAL NAME: ADHESIVE// EVERFAST GLUE
   ARE YOU ADDING 'EVERFAST GLUE' AS A NEW MATERIAL NAME (THE 2ND FOR THIS MATERIALS)? Y
  (YES)
Select MATERIAL NAME:
Select LOCAL STOCK NUMBER:  (3)
SPECIFICATION: MIL-2938495  (4)
MANUFACTURER DAY TELEPHONE: (301) 3984-3948  (5)
MANUFACTURER NIGHT TELEPHONE: ^MANUFACTURER DAY TELEPHONE
MANUFACTURER DAY TELEPHONE: (301) 3984-3948// (301)394-3948
MANUFACTURER NIGHT TELEPHONE:
DISTRIBUTOR NAME: ALLIED MATERIALS
DISTRIBUTOR ADDRESS: 392 MAPLE ST., WEST ORANGE NJ 30293
DISTRIBUTOR DAY TELEPHONE: 209 39203940
DISTRIBUTOR NIGHT TELEPHONE:
SPECIAL HAZARDS: NONE
NFPA CODE: 321SOL
SPECIAL LABELING: FLAMMABLE LIQUID// FLAMMABLE SUBSTANCE
ROUTE OF EXPOSURE: CONTACT WITH SKIN
CARCINOGENICITY: LUNG TUMORS
TERATOGENICITY: NONE KNOWN
MUTAGENICITY: UNKNOWN
SPECIAL TRAINING REQUIRED: NONE
SPECIAL/EARLY WARNING PROP.: ITCHING,REDNESS
NEUTRALIZING AGENT: WATER
COMMON USE: BONDING AGENT
MSDS EXPOSURE LIMIT: 10 PPM
MIXTURE REPORTABLE SPILL QTY.: 1 LITER
COLOR: BROWN
COLOR NUMBER: 293
ACUTE TOXIC EFFECTS: SKIN IRRITATION
CHRONIC TOXIC EFFECTS: UNKNOWN
ENTER MATERIAL NAME:
```

FIGURE 4-3

EXAMPLE OF ENTER/EDIT EXTRA FIELDS

NOTES ON EXTRA FIELDS INPUT SEQUENCE

1. You may enter any of several material identifiers here to look up the HMIS entry, MSDS, or worker data sheet that is to be edited. These identifiers include trade name, stock number, NIIN, MSDS number, worker data sheet number, vendor, chemical name, specification, work control document number, and ingredient CAS and NIOSH numbers. A list of entries containing the identifier will be displayed and you may then select the correct one from the list.

2. The system expects the first name you enter here to be the material's trade name. Following that entry, you may enter whatever other names the material has.

3. This prompt is for a multiple field so you may enter as many locally-generated stock numbers as apply to this material.

4. This prompt is for the military performance standard that some materials must meet. The field is optional.

5. The remaining prompts are free text fields that may be entered at your discretion.

```
ENTER MATERIAL NAME:    M/06835-15      ADHESIVE    PERMAFUSE CORP        (1)
REMARKS:
  1> THIS MATERIAL CANNOT BE REMOVED FROM SKIN AFTER IT SETS FOR 20 MINUTES
  2>
EDIT Option:
C-STOCK NUMBER:
C-MATERIAL NAME:
C-DATE OF ENTRY: ^COLOR??          (2)
C-DATE OF ENTRY: ^C-COLOR
C-COLOR: THIS MATERIALS TURNS BLACK ON EXPOSURE TO SOLVENTS
C-COLOR NUMBER: ^

ENTER MATERIAL NAME:
```

FIGURE 4-4

EXAMPLE OF ENTER/EDIT LOCAL COMMENTS

NOTES ON LOCAL COMMENTS INPUT SEQUENCE

1. You may enter any of several material identifiers here to look up the HMIS entry, MSDS, or worker data sheet that is to be edited. These identifiers include trade name, stock number, NIIN, MSDS number, worker data sheet number, vendor, chemical name, specification, work control document number, and ingredient CAS and NIOSH numbers. A list of entries containing the identifiers will be displayed and you may then select the correct one from the list.

2. The name of each comment field begins with the characters "C-" followed by the name of the corresponding data field. You may skip around to any comment field regardless of its position in the prompt sequence using the "^" convention.

- o Special training required
- o Special/early warning properties
- o Neutralizing agent
- o Common use
- o Acute toxic effects
- o U.I.C.
- o Facility

The following fields do not use special comments:

- o Local stock number
- o Work control document
- o Specification

Since the data in an HMIS entry cannot be edited, the use of the comment fields enables a facility to make remarks about the data in the HMIS entry. With regard to local MSDS entries, the data field itself may be edited or annotated with a remark in the associated comment field. Worker data sheets may have comments appended to the data fields but these comments will not appear on the printed data sheet that is given to workers. Such comments on worker data sheets fields, however, will appear on screen displays of the entry.

4.6 Enter/Edit Work Control Document

This option allows addition of work control document references to HMIS and MSDS entries. These references are provided by the local OSH office. When the user is prompted for "Material Name," any of several identifiers may be entered to look up the correct HMIS or MSDS entry. These identifiers include stock number, MSDS number, worker data sheet number, material name (including trade name), local stock number, manufacturer, distributor, FSCM, chemical name, specification, work control document number, NIIN, and ingredient CAS and NIOSH numbers. Details on this prompt sequence were shown in Figure 4-1.

4.7 Set Up New HMIS Record Input Sequence

If you update your Materials file by loading the entire HMIS data base into NOHIMS, you will NOT use this option. However, if your Materials file

contains only part of the HMIS data base, then you can use this option to do two things: (1) identify the HMIS records that you want added to your Materials file, or (2) identify existing Materials file entries that you want replaced with the current HMIS record.

All Materials file entries identified with this option will be added or replaced by HMIS records during the regular quarterly HMIS update described in Section 4.8. In addition, HMIS records that have been changed or deleted since the last quarterly update will pass those changes or deletions on to matching entries in the Materials file. Between quarterly updates you may add or replace selected Materials file entries by identifying them using this option, then processing the HMIS tapes until all identified entries have been added or replaced.

There are two ways of obtaining the three key fields that are needed by this option to identify an HMIS record. The first way is to search the HMIS microfiche records for the material you are interested in, writing down the stock number, FSCM, and part number indicator that is listed on the microfiche. The second way is to submit a report to NEHC listing all the local MSDS's that have been entered into your Materials file since your last update. NEHC will annotate your report with the national stock number, FSCM, and part number indicator of the HMIS record that corresponds to each MSDS on the report and return the annotated report to your OSH office. You will enter the stock number, FSCM, and part number indicator using this menu option. (See Figure 4-5, which contains details for this prompt sequence.)

4.8 HMIS Tape Load

This option allows loading of HMIS records into the Materials file. You must specify whether you are loading or reloading the whole HMIS data base, updating all entries in the Materials file, or just adding selected HMIS records to the Materials file from the HMIS tapes. You also have to specify whether you are loading safety or transportation tapes as each is processed differently. It is important that the safety tapes be loaded before the transportation tapes. Figure 4-6 contains details on our sample prompt sequence.

4.9 Delete Materials Record

When this option is selected, the user is prompted for a material. You may enter any one of the following identifiers that refers to the material to be deleted: stock number, MSDS number, worker data sheet number, material name (including trade name), local stock number, manufacturer, distributor, FSCM, chemical name, specification, work control document number, NIIN, and ingredient CAS and NIOSH numbers. The system will display one or more materials entries that match the identifier you enter. Select the one you want to delete and enter that number. The system will ask if you still want

```
ENTER STOCK NUMBER: P233N392X9102      (1)
   ARE YOU ADDING 'P233N392X9102' AS A NEW MATERIALS? Y  (YES)
STOCK NUMBER: P233N392X9102//_ (2)
FEDERAL SUPPLY CODE FOR MFR.: 9384   (3)
PART NUMBER INDICATOR: A      (4)
MSDS NUMBER: _          (5)

ENTER STOCK NUMBER: __
```

FIGURE 4-5

EXAMPLE OF SET UP NEW HMIS RECORD

NOTES ON SET UP NEW HMIS INPUT SEQUENCE

1. You are first prompted for the national stock number associated with the material on the HMIS tape that is to be loaded into the Materials file. Partial entries are not permitted; you must enter all 13 digits of the stock number. When the system asks you if you are adding a new materials entry, you should respond with "YES" if you are sure you have keyed the correct stock number. When you answer "YES", the system creates a skeleton record in the Materials file that will be filled out later during the HMIS update run.

   If you want an existing Materials file entry replaced during the update, enter the stock number of the existing entry and "null" through prompts two through four.

2. The system re-prompts you for the stock number to allow you to check for accuracy. If the number is incorrect, this is the time to correct it.

3. Enter the FSCM that is associated with the material's vendor.

4. This prompt is for the code that indicates whether the material you want to load is the first, second, third, etc. part of a multi-part item. Usually you will enter the letter "A" to indicate it is the first of one or many parts. It is important that you not confuse this part number indicator code with the part number that materials often have. This field is for part number indicator, NOT part number.

5. If the material to be loaded from the HMIS tape has a corresponding local MSDS in your Materials file, enter the local MSDS number with which the material is associated. If the HMIS material has no associated local MSDS, enter a hyphen or the letters "N/A" at this prompt. The system will only accept a valid MSDS number, a hyphen, or "N/A".

```
UPDATE ALL EXISTING ENTRIES
ADD/CHANGE SELECTED ENTRIES
LOAD ENTIRE HMIS DATA BASE

SELECT OPTION: UPDATE  (1)

SAFETY
TRANSPORTATION

LOAD WHICH TAPE? SAFETY  (2)

0 RECORDS PROCESSED  (3)

TAPE LOAD COMPLETE
```

```
UPDATE ALL EXISTING ENTRIES  (4)
ADD/CHANGE SELECTED ENTRIES
LOAD ENTIRE HMIS DATA BASE

SELECT OPTION: LOAD

SAFETY
TRANSPORTATION

LOAD WHICH TAPE? TRANSPORTATION

HAVE SAFETY TAPES BEEN LOADED? Y  (5)

0 RECORDS PROCESSED

TAPE LOAD COMPLETE
```

FIGURE 4-6

EXAMPLE OF LOAD HMIS RECORDS

NOTES ON LOAD HMIS INPUT SEQUENCE

1. There are three ways to update the Materials file with HMIS data. The first is "Update All Existing Entries" which replaces entries in the Materials file with data from the HMIS tapes only if: (1) the record on the HMIS tape has a change code of A, C, or D (for add, change, or delete) and the entry already exists in the Materials file, or (2) the entry was set up for HMIS replacement by entering the three key fields in the "Setup New HMIS Record" option. The second way to update the Materials file is to select the "Add/Change Selected Entries" option. This option allows replacement of only those Materials file entries that were set up for replacement by entering the three key fields in the "Setup New HMIS Record" option. The third way to update the Materials file is to load the entire HMIS data base into the Materials file, replacing all existing entries with HMIS data.

2. The answer to this prompt tells the system what format to use when it reads the HMIS tapes. If you tell it that you have mounted a safety tape, it will use the safety tape format. If you tell it you have mounted a transportation tape, it will use the transportation tape format. It is important that you are sure which type of tape has been mounted before answering this prompt.

3. If no tape was mounted, this message will indicate that no records were processed. Otherwise, the message will indicate how many records were copied or updated.

4. This option is repeated here to show the sequence of prompts that are used for loading transportation tapes.

5. This prompt is to ensure that you have loaded the safety tapes before you try to load the transportation tapes. If you answer "NO" to this prompt, the system will instruct you to load the safety tapes and will return to the menu.

to delete that material. If you are sure you have selected the correct one, answer "YES" to the prompt and the material entry will be deleted.

4.10 WDS Approval

When you select this option, the system will ask you for the material (worker data sheet) that you want to approve for distribution. You may enter any one of the following identifiers to look up the worker data sheet: worker data sheet number, stock number, manufacturer, distributor, FSCM, chemical name, specification, work control document number, NIIN, and ingredient CAS and NIOSH numbers. The system will display identifying information for all the worker data sheets that match the identifier. You should select the one you want to approve. The system will then prompt you to enter the approval code (A).

4.11 Search for Material

There are several different approaches to finding an HMIS entry, MSDS, or worker data sheet in the Materials file. Each approach is listed as a menu suboption:

1. Worker Data Sheet Search	This option prompts the user for a search phrase. You may enter any of the following items following this prompt: stock number, MSDS number, worker data sheet number, material name (including trade name), local stock number, manufacturer, distributor, FSCM, chemical name, specification, work control document number, NIIN, and CAS and NIOSH numbers for ingredients.
2. Material Name Search	You may enter any of the names by which the material may be known, including but not limited to the trade name.
3. Ingredient Search	Details for this search are contained in Figure 4-7.
4. Chemical Name Search	This is the name that was entered into the chemical name field when the Materials file entry was created or edited.
5. Vendor Search	The Vendor Search is more complicated. Here you may enter any one of the following: manufacturer's name,

```
ENTER INGREDIENT NAME: FLUORINE          (1)
        ...OK? YES// _ (YES)
SELECT LIMIT: (TLV,PEL,OTHER) PEL        (2)
ENTER LOWER LIMIT: 50                    (3)
ENTER UPPER LIMIT: /50/  200             (4)
ENTER UNITS: PPM                         (5)

     1  SUPERSOL-80   M/00181-23  UNION CARBIDE
     2  SUPERSOL-80   W/54545-51  UNION CARBIDE

SELECT MATERIAL: 1  SUPERSOL-80          (6)

MSDS NUMBER: M/00181-23        MSDS DATE: SEP  2, 1986

PRESS RETURN TO CONTINUE: _              (7)

STOCK NUMBER: M/00181-23
MATERIAL NAME: SUPERSOL-80
MATERIAL NAME: DEGREASING SOLVENT
LOCAL STOCK NUMBER: MARE-101
PRINT FLAG: P            HMIS DATA FLAG: A       MANUFACTURER NAME: UNION CARBIDE
 MANUFACTURER ADDRESS: OLD RIDGEBURY ROAD, DANBURY CT. 06817
 EMERGENCY TELEPHONE NUMBER: (304) 291-3847          CHEMICAL NAMES: FLUORINE
 CHEMICAL FAMILY: FLUOROCARBONS          FORMULA: C6H5-OH
INGREDIENTS: FLUORINE          PERCENT: 5        TLV: 10
 CAS NO.: CAS-10938            NIOSH NO.: N-3928       PEL: 120
 PEL UNITS: PPM          TLV UNITS: PPM
INGREDIENTS: STODDARD SOLVENT       PERCENT: 58       TLV: 20
 CAS NO.: 1091829       NIOSH NO.: N-10928      PEL: 392          PEL UNITS: PPM
 TLV UNITS: PPM
BOILING POINT: 100 C           VAPOR PRESSURE: 29 MM HG      VAPOR DENSITY: 1.203
 SOLUBILITY IN WATER: 21 PPM        SPECIFIC GRAVITY: 2.19
 PERCENT VOLATILE BY VOLUME: 29%          EVAPORATION RATE PER REFERENCE: 10
 APPEARANCE AND ODOR: CLEAR AND ODORLESS        FLASH POINT: 200 C
 LOWER EXPLOSIVE LIMIT: 1.8         UPPER EXPLOSIVE LIMIT: 100.9
 EXTINGUISHING MEDIA: FOG
 ^C TO HALT: ^

ENTER INGREDIENT NAME: _
```

FIGURE 4-7

EXAMPLE OF SEARCH FOR INGREDIENT

NOTES ON SEARCH INGREDIENTS OUTPUT

1. You should enter the name of the ingredient on which to base your search. If the name is not already in the Ingredients file, the system will respond with two question marks and return to the prompt.

2. If the search should be limited to only those ingredients whose limits fall within certain specified bounds, the type of limit should be entered at this point. These three limit categories (PEL, TLV, and Other) correspond to data fields in the Ingredients file. In general, local MSDS's may contain data in these fields but HMIS entries do not. The original HMIS tapes do not contain this data. Worker data sheets will contain the information if it was created from a local MSDS entry that contained the data.

3. You should enter a number that corresponds to the lower bound of the limit search. The units should not be entered at this point.

4. You should enter a number that corresponds to the upper bound of the limit search. The units should not be entered at this point.

5. The units that go with the lower and upper bounds should be entered here.

6. The system will list all the materials that contain the specified ingredient and, if appropriate, have limits within the specified bounds. You should enter the number of the item that you want displayed on the screen.

7. The system will display certain identifying information, such as MSDS number, MSDS date, worker data sheet number, and date; and then it prompts you to press the RETURN key to continue the display. If you enter an "^" at this point, the system will return to the Ingredient prompt for another search without displaying the selected material entry.

distributor's name, or the federal supply code for manufacturers (FSCM). The system will look for materials with the same manufacturer, distributor, or FSCM and list the materials that match your input.

6. Stock Number Search — This is conducted on both local stock numbers and national stock numbers without you having to identify which you are using. The number input is matched against all local and national stock numbers contained in the Materials file.

7. CAS/NIOSH Number Search — This search uses the number you input to match against all the CAS and NIOSH numbers associated with all the ingredients in all the materials in the Materials file. If there are any matches, the system lists those materials and prompts you to select one for display.

8. MSDS Number Search — The MSDS Number Search will find all local MSDS's that have that number as their key field as well as the HMIS entries and the worker data sheets that have been linked to that local MSDS. The system will display a list of matching materials and prompt you to select one for display.

9. Specification Search — This search matches your input against the specification field in the Materials entry. The specification field is one of the standard fields in an HMIS record and will be present on some of the HMIS entries and the worker data sheets derived from those HMIS entries. The specification field will only be present on MSDS's where the local OSH office has specifically obtained and entered the data.

10. NIIN Search — The NIIN search matches your input against the last nine digits of the national stock number for HMIS entries. Local MSDS's and worker data

		sheets do not contain references to NIIN's.
11.	Work Control Document Search	This search matches your input against all references to work control documents in all Materials file entries. All materials that match are listed and you are prompted to select one for display.

4.12 Data Sheet Print

This output option allows the user to print either a worker data sheet or a full listing of all the data on a particular material. If you select the worker data sheet option, you will be prompted for information on who requested the data sheet and for which shop. Figure 4-8 contains details regarding the data input for this option.

If you select the "MSDS Print" option, you will be prompted for the material name. You may enter any of the following identifiers in response to this prompt: stock number, MSDS number, worker data sheet number, material name (including trade name), local stock number, manufacturer, distributor, FSCM, chemical name, specification, work control document number, NIIN, and CAS and NIOSH numbers for ingredients. This option may be used to print any entry in the Materials file (HMIS, local MSDS, or worker data sheet). It is used to get a full listing of all the information input to a given entry.

4.13 Indexes of Materials Records

This menu option has the following suboptions:

1 Vendor Index

2 Trade Name Index

3 MSDS Data Index

4 WDS Index

If you select the "Vendor Index" option, you will be prompted for a range of vendor name and trade name. The resulting index will contain all the HMIS entries that fall within the range of vendor and trade name that you specified. All the local MSDS's that do not have corresponding HMIS entries and that fall within those ranges also are printed. There are no worker data sheets on this index. The "Trade Name Index" option is similar to the "Vendor Index" except that you are prompted for a range of trade names

```
ENTER WDS NUMBER:    W/54545-50      ADHESIVE    PERMAFUSE CORP      (1)

THIS DATA SHEET NOT APPROVED FOR DISTRIBUTION

ENTER REQUESTOR'S NAME: SMITH,JOE      (2)
   ARE YOU ADDING 'SMITH,JOE' AS A NEW DATA SHEET REQUESTS (THE 3RD)? Y  (YES)
BADGE NUMBER: 93028
SHOP: 011
Select DATA SHEET REQUESTED: W/54545-50      (3)
   ARE YOU ADDING A NEW DATA SHEET REQUESTED (THE 1ST FOR THIS DATA SHEET REQUESTS)? Y
  (YES)
  MATERIAL NAME: ADHESIVE// __      (4)
  DATE REQUESTED: T  (AUG 29, 1986)
  REQUEST STATUS: REC??

CHOOSE FROM:
        S         SENT
        P         PENDING
        C         CANCELLED
        O         OTHER
  REQUEST STATUS: S  SENT
Select DATA SHEET REQUESTED: __

DEVICE: ^
TRY LATER          (5)

ENTER WDS NUMBER: __
```

FIGURE 4-8

EXAMPLE OF PRINT WORKER DATA SHEET

NOTES ON WORKER DATA SHEET PRINT OUTPUT

1. You may enter either the full worker data sheet number or just the final sequence number. If you enter just the sequence number, the system will append the U.I.C. for the default agency specified at system startup.

2. The format for the requestor's name is last name followed by a comma and then the first name and middle initial.

3. The user should enter the worker data sheet number of the WDS to be printed. This field is a multiple so there may be many data sheets requested for any given requestor.

4. The system will automatically display the first material name on the worker data sheet as the default. You may accept the default or enter any other name for the material. The name does not have to be one of the material's names on file for that material. The name you enter will only be associated with the request and will not be added to the entry in the Materials file.

5. If the prompt sequence is interrupted at any point prior to or including this prompt, the data sheet will not print.

first, then vendor name. The "MSDS Index" option is similar to the first two index options except that you are only prompted for a range of MSDS dates. The "WDS Index" differs from the previous indexes in that it contains only worker data sheet entries. You will be prompted for a range of worker data sheet numbers and trade names.

4.14 MSDS Reports

This menu option contains the following suboptions:

1 MSDS Number Report

2 Stock Number Report

3 Entry Date Report

4 Specification Report

5 Health Code Report

6 Fire Code Report

7 Reactivity Code Report

8 Specific NFPA Code Report

9 Form of Material Report

10 Ingredients Report

11 Work Control Document Report

12 CAS/NIOSH Number Report

All of the reports listed above contain all the HMIS entries in the Materials file that fall within the ranges input by the user at the time the report is printed. These reports also contain any local MSDS's not matched by HMIS entries that fall within those ranges. Table 4-1 contains the field names for which the system prompts when you select any of the above options; in the table, the term "Stock Number" means national stock number for HMIS entries and local MSDS number for local MSDS's.

4.15 Manager Options

The four reports that summarize the status of the HMIS update run are given in Table 4-2 with the fields for which the system prompts. The other report in the "Manager Options" menu is the Data Sheets Requested Report. No input is requiqred to print this report.

TABLE 4-1
SORT FIELDS FOR MSDS REPORTS

REPORTS	SORT FIELDS
MSDS Number Report	MSDS Number, Stock Number
Stock Number Report	Stock Number
Entry Date Report	MSDS Data
Specification Report	Specification
Health Code Report	Health Code, Stock Name
Fire Code Report	Fire Code, Stock Number
Reactivity Code Report	Reactivity Code, Stock Number
Specific NFPA Code Report	Specific Hazard Code, Stock Number
Form Of Material Report	Material Form, Stock Number
Ingredients Report	Ingredient Name
Work Control Document Report	Work Control Document Number
CAS/NIOSH Number Report	CAS Number, NIOSH Number

TABLE 4-2
SORT FIELDS FOR HMIS STATUS REPORTS

REPORTS	SORT FIELDS
HMIS Update Report	(None)
Materials Load Error Report	(None)
MSDS Not Matched By HMIS Record	MSDS Number
Ingredients Not In Stressor File	Ingredient Name, Manufacturer

4.16 Source of Worker Data Sheets

This option allows the user to identify all the worker data sheets that have been created from a single HMIS entry or MSDS entry. The user enters an MSDS number or national stock number and the system displays all the worker data sheets that have been created from that entry.

5.0 DATA SHEETS REQUESTED INFORMATION PROCESS

5.1 Introduction

In Section 4.12, we described the input sequence for the Data Sheet Print option in which the user is prompted for information about the person requesting the data sheet. This prompt sequence can also be accessed in the "Request for Data Sheet" option on the main menu. The exact same prompts are used in both sequences.

5.2 Data Sheets Requested

One of the suboptions under the Manager's Options menu is the "Data Sheets Requested" report. This report summarizes the information in the Data Sheet Requestors file. There is no user input for this print option.

INDEX